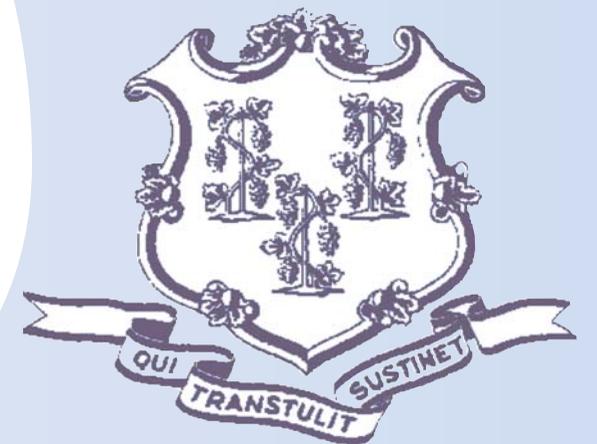


# Long-Range

## Transportation Plan

for the  
State of  
Connecticut  
2004 - 2030

DRAFT



May 2004

## A MESSAGE FROM THE COMMISSIONER

Spring 2004



To the Residents of the State of Connecticut:

We are pleased to present to you the *Long-Range Transportation Plan for the State of Connecticut (2004 LRP)*. This federally-mandated policy document was developed to guide transportation policies, programs and investments through the year 2030. It will be used as a framework for developing future transportation planning documents such as the 2005 Master Transportation Plan (MTP) and the State Transportation Improvement Program (STIP).

It discusses the planning process, federal mandates and the input used to develop the document. It identifies mandated federal factors that must be addressed, discusses major transportation-related issues facing the State of Connecticut, and outlines general strategies and actions to address them. It presents the overarching objective and general transportation strategies proposed by the Connecticut Transportation Strategy Board and adopted by the Connecticut General Assembly, and it is consistent with both the *Conservation and Development Policies Plan for Connecticut 1998-2003* and the *Recommended Conservation and Development Policies Plan for Connecticut 2004-2009*.

The Connecticut Department of Transportation is committed to putting this plan into action. You are invited to participate in the shaping and periodic updating of this Plan. Your input into this Plan, coupled with our focus on putting it into action, will help to ensure that Connecticut meets the current mobility and economic needs in an environmentally sensitive manner, and that the future needs of Connecticut are met as our state changes over time. By working together we can make Connecticut a better place to live, work, conduct business and visit.

Sincerely,

Stephen E. Korta, II  
Commissioner

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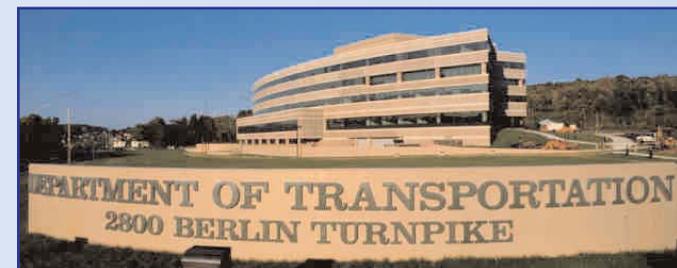
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*It is in the national interest to encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and through urbanized areas, while minimizing transportation-related fuel consumption and air pollution. - U.S. Code, Title 23, Section 135*

## OVERVIEW

This long-range transportation plan is the federally recognized transportation plan for the State of Connecticut. Section 450.214 of the Code of Federal Regulations (CFR) which implements Section 135 of Title 23 of the United States Code requires that Connecticut prepare and periodically update (every 3 to 5 years) a statewide, intermodal transportation plan that addresses specified factors and covers a period of at least 20 years. The *Long-Range Transportation Plan for the State of Connecticut* (2004 LRP) covers the period 2004 through 2030 and updates the State of Connecticut's 1998 *Long-Range Transportation Plan*.

In this 2004 LRP, the State, through the Connecticut Department of Transportation, identifies transportation strategies necessary to efficiently serve the mobility needs of people and for the movement of freight. This plan will serve as a framework for preparing future more project-specific transportation plans such as the Department's 2005 Master Transportation Plan (MTP) and the State Transportation Improvement Program (STIP). In addition, the State provides for coordination of transportation plans, programs, and planning activities with related planning activities being undertaken outside of metropolitan planning areas. The State also engages the public in the process for developing the plan and, upon its completion, the State must submit the plan to the Federal Highway Administration (FHWA).

## SEVEN FACTORS

The provisions of Section 450.214 CFR generally require each state to develop transportation plans and programs for all areas of the state and to carry out a transportation planning process that provides for consideration of projects and strategies that will...

- emphasize the preservation of the existing transportation system;
- promote efficient system management and operation;
- support the economic vitality of the United States, the States, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
- increase the safety and security of the transportation system for motorized and nonmotorized users;
- increase the accessibility and mobility options available to people and **for** freight;
- enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight; and
- protect and enhance the environment, promote energy conservation, and improve the quality of life.

This document addresses these seven factors set forth by the federal government. Chapter 2 of this document describes the planning process through which public input was solicited and incorporated into this 2004 LRP. Chapter 3 focuses on the seven factors as they relate to issues affecting Connecticut's transportation network. Specific strategies and actions for maintaining and improving the quality of the transportation system, the quality of life for our residents and visitors, and the economic vitality of the state, are also outlined in Chapter 3.





## PUBLIC PARTICIPATION REQUIREMENTS

In developing a long-range transportation plan, the State provides citizens, affected public agencies, representatives of transportation agency employees, freight shippers, private providers of transportation, representatives of users of public transit, providers of freight transportation services, and other interested parties with a reasonable opportunity to comment on the proposed plan.

The Department complies with the federal public outreach requirements by following the guidance and procedures outlined in its public outreach plan, entitled *A Guide for Public Outreach* (November 1995). This document outlines a process for establishing a public partnership in the development of transportation programs and projects.

The following procedures were noted in the guide:

- the option to publish a public notice of intent to update or develop a new LRP at the onset of the process;
- development of a draft LRP to be available at various public locations throughout the State for public review;
- public notice of the availability of the draft LRP for review and comment;
- provision of a minimum of thirty-days within which public comment on the draft LRP may be submitted;
- provision of a public meeting during the later sixteen days of the thirty-day public comment period on the draft;
- preparation of the final LRP to be available at various public locations for informational purposes; and
- public notice of the availability of the final LRP.

*The characteristics of successful participation are inclusiveness, early involvement, and clear, accurate information.*

## PARTICIPANTS IN THE PROCESS

Federal laws, regulations and executive orders dictate the players in the transportation planning process, the specific roles of players and the timeframes for updating and submitting required transportation planning documents. The laws and regulations also specify the modes of transportation considered, requirements for spending and allocating federal transportation funds, and the criteria for approving projects.



This 2004 LRP has been developed by the Department with the following special considerations:

with respect to each metropolitan area in the State, cooperation with the metropolitan planning organization;

with respect to nonmetropolitan areas, the concerns of local elected officials representing units of general purpose local government; and

the concerns of Indian tribal governments and **Federal** land management agencies that have jurisdiction over land within the boundaries of the State.

## PUBLIC OUTREACH EFFORTS

The Department initiated an ambitious public outreach effort prior to development of the draft 2004 LRP. As a means of reaching a wide audience, a number of methods of communication and advertisement were used to solicit public input.

### IN PREPARATION OF THE DRAFT

Listening Sessions were held at seven locations throughout the State to solicit public input on transportation issues in Connecticut. The dates, times, and locations of these sessions were coordinated with staff of the regional planning organizations. All facilities were handicapped accessible and assistance for the deaf and hearing impaired was available upon request. The seven Listening Sessions held in September 2003 coincided with a public comment period that extended more than 50 days. The schedule for the Listening Sessions was as follows:

Session I : Rural Eastern Connecticut - Willimantic, CT - Eastern Connecticut State University on Tuesday, September 9, 2003 from 4:00PM - 6:00PM

Session II : Greater Hartford Area - Newington, CT - Newington Senior and Disabled Center on Thursday, September 11, 2003 from 7:00PM - 9:00PM



Session III : New Haven Area - New Haven, CT - Harry A. Conte/West Hills Magnet School on Monday, September 15, 2003 from 5:00PM - 7:00PM

Session IV : Housatonic /Central Naugatuck Valley Area - Southbury, CT - Town Hall on Wednesday, September 17, 2003 from 7:00PM - 9:00PM

Session V : Southeastern Connecticut - Montville, CT - Uncas on Thames Campus (Southeastern Mental Health Authority) on Thursday, September 18, 2003 from 7:00PM - 9:00PM

Session VI : Bridgeport/Stamford Area - Norwalk, CT - City Hall, Community Room on Monday, September 22, 2003 from 7:30PM - 9:30PM

Session VII : Rural Western Connecticut - Torrington, CT - Sullivan Senior Center on Wednesday, September 24, 2003 from 7:00PM - 9:00PM

**Presentation**

During each Listening Session, Department staff, prior to opening the floor for public comment, delivered a digital slide presentation which outlined...

the process for developing the 2004 LRP;  
 the needs identified to-date; and  
 the key factors and issues that influence transportation-related decisions and investments in Connecticut.

**Direct Mailings & Contact**

Interested parties were contacted and updated on the process via electronic mail, statements at monthly/quarterly meetings of various organizations, and direct mailings, including an extensive mailing of informational brochures. The brochures...

outlined the Listening Session schedule and anticipated publication dates of the draft and final documents;  
 were printed in a format suitable for posting on community boards;  
 were posted at selected rail and bus stations;  
 were distributed to municipalities, public and academic libraries, and various regional, State and federal personnel as well as other interested parties, including transit operators, tribal nations, airport managers, bicycle enthusiasts, and motor transport representatives; and  
 were forwarded in a large print version to senior/disabled centers throughout the State.

**Display Advertisements**

Announcements of the 2004 LRP process, Listening Session schedule, and contact information for submitting comments were published in nine media publications with regional and state coverage, including two publications with distributions to minority populations in Connecticut and Massachusetts.

**Press Releases & Media Coverage**

Press releases were distributed throughout the public outreach process. With each release, approximately 150 newspaper, television, and radio organizations were contacted, including organizations serving minority and low-income populations. The releases announced the Listening Sessions, listed event schedules, promoted attendance, and provided reminders of the deadline for comments. As a result, a number of media organizations covered the Listening Sessions, providing both announcements for local sessions and coverage of the events.

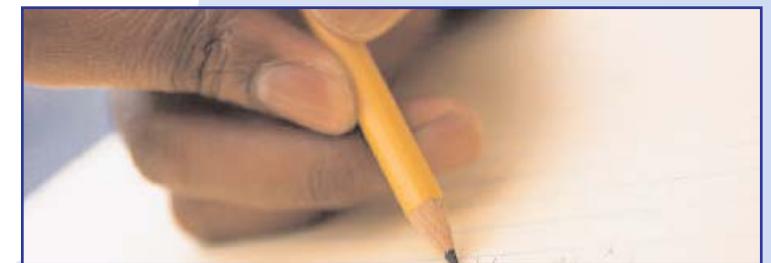
ability, both online and in hard copy, upon request. Hard copies of the Plan will be available for review at selected locations. In June of 2004, the final 2004 LRP will be submitted to the Federal Highway Administration for approval.

## INPUT & INFORMATION CONSIDERED

When developing a long-range transportation plan, the Department provides a reasonable opportunity to comment on the proposed plan. As noted previously, considerable effort was made by the Department to expand the public's opportunity to comment on the 2004 LRP as well as to obtain public input early in the planning process. The two comment periods, along with numerous press releases and several forms of communication, will have provided a variety of methods for fulfilling the Department's public input requirements.

### PUBLIC COMMENT

The Listening Sessions were attended by a total of approximately 150 people. Prior to the preparation of the draft plan, approximately 75 people submitted written comments. Comments received at the Listening Sessions and during the public comment period were summarized, made available to appropriate Department staff, and considered when preparing the draft 2004 LRP. Public input received on the draft 2004 LRP will be considered in preparing the final plan.



### Information Package

All attendees of the Listening Sessions were supplied with an information package that contained...

a brochure;

an outline of opportunities for public input;

a listing of other pertinent documents;

an input, ideas, and comment sheet; and

a list of major planned and ongoing studies and projects, and copies of maps showing the locations of the studies and projects

### Internet

Throughout the public outreach process, items pertinent to the development of the 2004 LRP were posted on the internet as follows...

press releases, materials distributed during the Listening Sessions, and contact information were posted on the Department's website (<http://www.ct.gov/dot>);

the presentation provided at the Listening Sessions was also posted on the Department's website in several formats, including text only, to ensure accessibility by persons using text readers; and

whenever possible, press releases were also posted on the State of Connecticut's master website and the various individual websites maintained by the regional planning organizations.

### THE DRAFT PLAN

The draft 2004 LRP was available on the Department's website to view and download beginning May 20, 2004. A press release was distributed announcing the completion of the draft plan; its availability both online and in hard copy, upon request; and the date and location of a public information meeting at which the public may comment on the document. In addition, a notice of availability was mailed (electronically, when addresses were available) to municipalities, public and academic libraries, and various regional, State and federal agencies as well as other interested parties, including individuals who provided their names and mailing addresses during the initial public input period. Also, a large print version of the notice of availability was mailed to senior/disabled centers throughout the State. Two public information meetings have been scheduled for June 8, 2004, at the Connecticut Department of Transportation in Conference Rooms A & B, one in the afternoon from 12:30 P.M. - 2:00 P.M. and one in the evening from 6:00 P.M. - 7:30 P.M. The 30-day comment period for review of the draft 2004 LRP will end June 18, 2004.

### THE FINAL PLAN

The final 2004 LRP will be posted online at the Department's website in an accessible format. In addition, a notice of availability will be mailed to municipalities, public and academic libraries, and various regional, State and federal personnel as well as other interested parties. A press release will be distributed announcing the completion of the 2004 LRP and its avail-

## RELEVANT PUBLICATIONS & SOURCES OF INFORMATION

In addition to public comment, a number of other resources were reviewed and considered in preparing this document. These include relevant laws and regulations, the State's conservation and development policies plan (Plan of C & D), regional long-range plans (LRPs) developed by Connecticut's Regional Planning Organizations (RPOs), recommendations of the Connecticut Transportation Strategy Board (TSB), and various other documents.

The policies, directions, and actions outlined in this plan will serve as a framework for updating future transportation plans such as the 2005 Master Transportation Plan (MTP) and the Statewide Transportation Improvement Program (STIP).



long-range transportation plan

## Conservation and Development Policies Plan (Plan of C & D)

Connecticut's Office of Policy and Management develops and updates the State's conservation and development policies plan. In preparing the 2004 LRP, the Department reviewed both the *Conservation and Development Policies Plan for Connecticut 1998-2003* and the *Recommended Conservation and Development Policies Plan for Connecticut 2004-2009*. The strategies and actions outlined in the 2004 LRP are consistent with both documents. The following six growth management principles were identified in the *Recommended Conservation and Development Policies Plan for Connecticut 2004-2009* and will be carefully considered as part of the Department's ongoing planning efforts:

- redevelop and revitalize regional centers and areas with existing or currently planned physical resources;
- expand housing opportunities and design choices to accommodate a variety of household types and needs;
- concentrate development around transportation nodes and along major transportation corridors to support the viability of transportation options;
- conserve and restore the natural environment, cultural and historical resources, and traditional rural lands;
- protect and ensure the integrity of environmental assets critical to public health and safety; and
- promote integrated planning across all levels of government to address issues on a statewide, regional, and local basis.

## Connecticut Transportation Strategy Board (TSB)

In June 2001, the Connecticut General Assembly passed Public Act 01-5. This Act created the TSB to develop a long-term transportation strategy for the State of Connecticut. The TSB was also mandated to identify actions to achieve the strategy during the next 10 years, estimate the amount of funds necessary to implement the actions, and suggest sources of revenue for funding the actions.

In designing a strategy, the Board was directed to achieve certain results, including stimulating sustainable economic growth and enhancing the quality of life of state residents; improving mobility of people and goods; enhancing connectivity to the regional, national, and global economies; and enhancing the safety and security of the transportation network. The Act also specified organizational structures and procedures for providing for stakeholder input into the development of the strategic plan.



In so doing, the TSB identified an overarching objective, a vision for the State, a vision for transportation in Connecticut, and five strategies for achieving the objective. In December 2002, the TSB submitted its strategic plan, entitled *Transportation: A Strategic Investment*, dated January 2003, to the State Legislature for action. In the 2003 Legislative Session, the General Assembly accepted the five strategies formulated by the TSB, and identified projects that the TSB recommended for implementation.

### Overarching Objective

To strengthen and expand the State's transportation system over the next 20 years to enhance Connecticut's prospects for sustainable economic growth and a premier quality of life in a manner consistent with environmental standards; use evaluation techniques and metrics to support major capital investments and operations in the system; and ensure the proper integration of land use planning with transportation planning and investment decisions to support the intelligent management of the State's projected growth in population densities, commercial development, automobile usage, and freight shipments.

### Vision for the State

- Strong linkages to regional and global economies
- Robust economy
- Stimulating urban centers
- Employment opportunities
- Pristine shoreline and rural areas

### Vision for Transportation

- Reduced congestion on Connecticut's highways, especially in the Coastal Corridor
- Easier access to expanding attractions in the Southeast Corridor
- Transit centers serving as magnets for business and housing
- Fully developed deep water ports
- A strengthened airport system, especially at Bradley International Airport
- An enhanced transportation system that stimulates economic development

### TSB Strategies

**Economic** - leverage existing transportation and other infrastructure assets, especially in urban centers and focus appropriate resources on mitigating and managing road congestion throughout the State with a focus in the near term on the Coastal Corridor

**Movement of People** - expand and market the quality and quantity of options to single occupancy vehicle (SOV) trips; encourage employer participation in demand management programs (such as ridesharing, reduced work week, telecommuting); enhance the customer's transit experience; improve transit travel times through better integration of all transportation options; increase the capacity of roads and improve the operating efficiency of transit through continued focus on information, safety and incident management tools; and expand targeted portions of certain roads

**Movement of Goods** - expand and coordinate the State's air, rail, road and water-based infrastructure; improve the flow and safety of commercial truck traffic; and provide a broader range of competitive options to commercial trucks

**Special Funding** - implement a comprehensive and dedicated 10-year financing plan to raise monies to fund capital investments needed to implement identified strategies

**Ongoing Funding** - ensure adequate and reliable financing of the State's ongoing capital and operating transportation needs, including the amounts needed (i) for its public transportation system to respond to evolving public needs and (ii) for greater flexibility within the State's annual transportation budget regarding the amount required to service outstanding debt

# Chapter 3

## Issues, Strategies & Actions

Issues, Strategies & Actions

## UNDERLYING PRINCIPLES

The ability of Connecticut's transportation system to meet the current and future mobility needs of residents, visitors and businesses affects the quality of life in the State and, hence, its desirability as a place to live, work, conduct business and visit. Creating quality urban environments and offering stable, livable neighborhoods will help attract people and development inward to built-up areas in existing Connecticut communities where infrastructure is already in place. This will provide the greatest benefit for our environment and quality of life, and will also be the most cost-effective approach for long-term maintenance of the transportation system. The State's economic vitality is tied to the ability of its transportation system to meet the current and future state, regional and national mobility needs. This chapter identifies major transportation-related issues and challenges facing the State, and outlines strategies and actions to address them.

### OUR RESPONSIBILITIES...

The agency shall be responsible for all aspects of the planning, development, maintenance and improvement of transportation in the state. (Sec. 13b-3 CGS)

### OUR MISSION...

It is the mission of the Connecticut Department of Transportation to provide a safe, efficient, and cost-effective transportation system that meets the mobility needs of its users.

### OUR PRINCIPLES...

In order to achieve our mission, the Department will continue to strive toward realization of the following principles:

<b>Upgrade:</b>	to strive to identify, analyze, and continually improve the way we do our work so that we may deliver better products and services, and improve our work environment.
<b>Productivity:</b>	to operate the Department with maximum efficiency, so as to create additional resources for investment in the transportation infrastructure.
<b>Safety:</b>	to maintain the transportation system to ensure continued high levels of safety and mobility.
<b>Efficiency:</b>	to maximize the utilization and efficient operation of existing transportation assets.
<b>Determination:</b>	to focus our human and financial resources on priorities established through an ongoing, analytical planning process that continually asks the question, "What should the Department do next to fulfill the Mission?"
<b>Mobility:</b>	to invest in projects that ensure safety, maintain the existing transportation infrastructure, increase the productivity of the transportation system, promote economic development, and provide necessary capacity enhancements.
<b>Funds:</b>	to effectively use all available federal and state funds.
<b>Environmental:</b>	to seek to protect and enhance the natural environment as we develop transportation improvements.
<b>Advisory:</b>	to engage stakeholders in a consultative process from the earliest stages of project development.

### OUR VALUES...

<b>People:</b>	respect for the diversity, talents and ideas of all Department team members.
<b>Excellence:</b>	continuously reexamining our assumptions and always looking for a better way.
<b>Customer Service:</b>	commitment to understanding and satisfying the needs of our customers through a total quality effort.
<b>Teamwork:</b>	listening to each other, working with each other and relying on each other.
<b>Integrity:</b>	maximizing the effectiveness of the public resources entrusted to us.

## EXISTING SYSTEM PRESERVATION

*Preserving and improving the existing system is the most cost-effective method for providing a functional transportation network and sustaining economically vibrant communities.*

Given that resources and funding for transportation projects and services will continue to be limited in the foreseeable future, maintaining the existing transportation system in a state of good repair is one of the Department's highest priorities.

### ISSUES

Preserving the existing system is costly, requiring adequate and reliable allocations of resources and funding for continual maintenance. Maintenance of the existing system is necessary to ensure efficient movement of people and freight as well as the safety of the travelling public.

### STRATEGY

*Emphasize the preservation of the existing transportation system...*

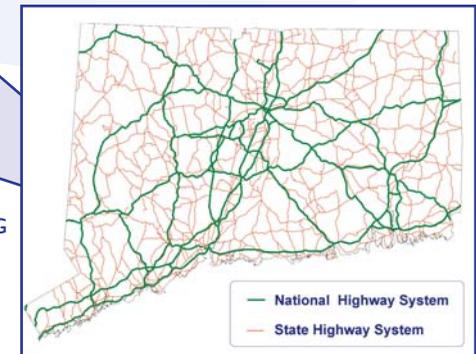
### ACTIONS

Support transportation system preservation improvement projects in areas where the infrastructure is already in place

Support efforts that focus on maintenance and improvement of the existing transportation infrastructure



THE DEPARTMENT IS RESPONSIBLE FOR REMOVING SNOW AND ICE FROM INTERSTATE HIGHWAYS AND STATE ROADS, RESURFACING DAMAGED ROADWAY PAVEMENT AND PERFORMING ANNUAL SURVEYS, REPLACING DAMAGED GUIDERAIL; MAINTAINING SIGNALIZATION, ILLUMINATION, AND BRIDGES; REVISING TRAFFIC CONTROL SIGNALS FOR SAFETY AND TRAFFIC FLOW; INSPECTING OVERHEAD SIGN SUPPORTS; PERFORMING GEOTECHNICAL ENGINEERING SERVICES; OVERSEEING PROJECTS IN CONSTRUCTION; AND PROVIDING SAFETY IMPROVEMENTS ALONG THE STATE ROADWAYS.



THE LARGEST COMPONENT OF CONNECTICUT'S TRANSPORTATION SYSTEM IS ITS HIGHWAY NETWORK. AN OVERWHELMING MAJORITY OF PEOPLE AND GOODS IN CONNECTICUT ARE MOVED OVER THE PUBLIC HIGHWAYS.

WITH EVERY YEAR, PRESERVATION OF THE EXISTING FERRY SERVICES BECOMES MORE DIFFICULT AS FUNDING SOURCES CONTINUE TO DIMINISH. THE DEPARTMENT OPERATES TWO FERRIES IN THE STATE ACROSS THE CONNECTICUT RIVER. ADDITIONALLY, THERE ARE SEVERAL PRIVATELY-OWNED FERRY SERVICES THAT OPERATE BETWEEN POINTS IN CONNECTICUT AND RHODE ISLAND AND NEW YORK. IN THE FUTURE, HIGHWAY CONGESTION MAY DRIVE AN EXPANSION OF INTERSTATE AND INTRASTATE FERRY SERVICES.



Provide for routine maintenance and upgrading of rail safety hardware, service elements and operational features, including the following: tracks, bridges and structures, power systems and substations, signal systems, rolling stock, maintenance of equipment facilities, rail stations and platforms, and rail station parking

Provide for routine maintenance and upgrading of bus safety hardware, bus service elements, and operational features, including the rolling stock and maintenance facilities

Provide for routine maintenance and upgrading of highway safety hardware, highway elements, and operational features, including the following: guiderail, signs, pavement markings, utility poles, impact attenuators, highway/rail crossing warning devices, and bridges and structures

CONNECTICUT IS SERVED BY THREE PASSENGER RAIL OPERATIONS - THE NEW HAVEN LINE (NHL) COMMUTER SERVICE WHICH OPERATES BETWEEN NEW HAVEN, CONNECTICUT AND GRAND CENTRAL TERMINAL IN NEW YORK CITY WITH CONNECTING BRANCHES TO NEW CANAAN, DANBURY AND WATERBURY; THE SHORE LINE EAST (SLE) COMMUTER SERVICE WHICH OPERATES BETWEEN NEW HAVEN AND NEW LONDON WITH TWO SPECIAL SLE EXPRESS TRAINS THAT OPERATE WEST OF NEW HAVEN TO STAMFORD AND BRIDGEPORT; AND AMTRAK INTER-CITY PASSENGER SERVICE ALONG THE NORTHEAST CORRIDOR (NEC) BETWEEN NEW YORK AND BOSTON, AND THE INLAND ROUTE BETWEEN NEW HAVEN AND SPRINGFIELD, MASSACHUSETTS. THE DEPARTMENT OVERSEES AND FINANCIALLY SUPPORTS THE PROVISION OF TWO OF THE PASSENGER RAIL SERVICES: THE NEW HAVEN LINE (NHL) AND SHORE LINE EAST (SLE) SERVICES.

THE DEPARTMENT ALSO OWNS URBAN FIXED-ROUTE BUS SYSTEMS OPERATING IN THE HARTFORD, NEW HAVEN, STAMFORD, WATERBURY, NEW BRITAIN, BRISTOL, MERIDEN AND WALLINGFORD URBAN AREAS. THESE SERVICES OPERATE UNDER THE CTTRANSIT BRAND NAME AND ARE OPERATED BY PRIVATE CONTRACTORS. OTHER PRIVATE CONTRACTORS PROVIDE COMMUTER EXPRESS BUS SERVICES INTO HARTFORD. IN ADDITION, THERE ARE SEVENTEEN TRANSIT DISTRICTS THAT OPERATE THE REMAINING URBAN, RURAL, AND ADA PARATRANSIT SERVICE IN THE STATE.



Provide for routine maintenance of the State piers, the Connecticut River ferry vessels and facilities, and state-owned surface transportation elements that support air transportation facilities

Work with appropriate federal, State and local agencies, commissions and other interested parties to address issues and resolve problems associated with maintaining or improving water, rail and highway access to Connecticut's deep water ports

Identify, investigate, set priorities and correct hazardous or potentially hazardous situations to avoid magnification of repair costs and correct associated safety issues

Conduct evaluations at selected locations before and after modifications to determine an improvement's or product's value for future applications

Continue efforts to secure federal and state funding for maintenance of equipment and services

Encourage the federal government to increase funding available to projects that maintain adequate, safe and appropriate harbor and channel depths for goods movement

## SYSTEM MANAGEMENT & OPERATION

*In response to resource limitations, scattered development and the subsequent increased movement of people and goods, the State will develop and pursue innovative solutions to its transportation management and operational needs.*

Interagency communications, information sharing, real-time technology, and greater coordination of transportation system planning and land use planning are key components of the State's approach to maintaining and improving the performance of the State's transportation system. Timely, efficient and coordinated responses by appropriate local, state and federal agencies to accidents on or affecting the State's transportation system are critical to maintaining safety and minimizing travel delays. It is also essential to effectively and efficiently plan, manage and implement transportation maintenance and improvement projects to minimize additional travel delays and future costs to the State for maintenance of the transportation facilities. Encouraging consistency of local plans with state land use and transportation system plans, and encouraging interagency coordination at and among local, state and federal levels are critical to maximizing the State's resources to maintain a safe, productive transportation system. The Department will continue to establish partnerships among agencies, and use new and improved technology to facilitate future efforts to improve performance and address deficiencies in the system. The provision of real-time traveler information to the public and the media will be promoted in order to support a competitive business environment in the State and the region.

*Long-range transportation plan*

### ISSUES

Preservation of the existing infrastructure is a key component in managing and operating a transportation system and, although it requires the greatest amount of resources, it is only one facet of system management and operation. The Department, with its metropolitan planning organization (MPO) partners, is responsible for all aspects of the planning, development, maintenance and improvement of the state's transportation network for ensuring efficient and safe movement of people and goods. To fulfill its responsibilities, the Department will continue to constantly prioritize and maximize the use of available funding and resources through innovative and coordinated efforts.

### STRATEGY

*Promote efficient system management and operation...*

### ACTIONS

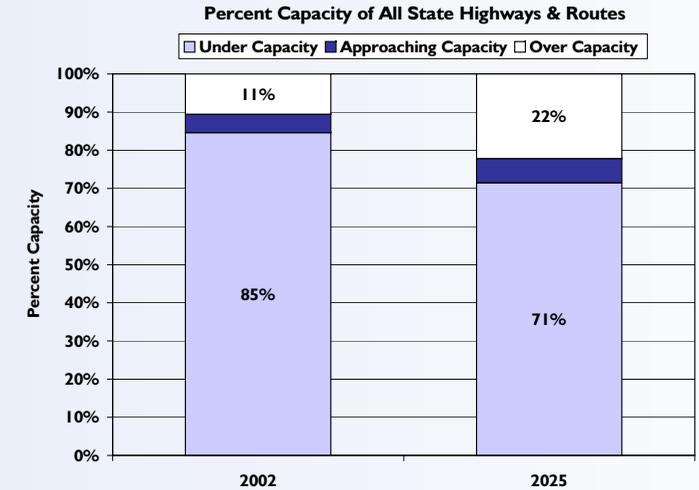
Continue to support programs that use advanced technology and coordinated efforts to maximize the efficiency of the existing system and improve intermodal connections, with particular attention to highly congested corridors

Implement, to the extent possible, the recommendations of the interagency Task Force on Incident Management

Promote appropriate coordinated use, maintenance, and improvement of Connecticut's airports, rail and port facilities as a means of efficiently moving freight into, through, and out of the State

Implement, to the extent possible, the recommendations outlined in the Department's I-95 Branford to Rhode Island and I-84 Waterbury to Danbury studies

WITH THE CURRENT FUNDING AND RESOURCES AVAILABLE, THE PORTIONS OF CONNECTICUT'S NATIONAL HIGHWAY SYSTEM (NHS) AND NON-NHS ROUTES WHICH ARE OVER CAPACITY DUE TO CONGESTION WILL CONTINUE TO GROW.



Source: Connecticut Department of Transportation, Bureau of Policy & Planning, Congestion Management File-July 31, 2002. Data following 2002 is projected. Graphic revised as of January 2004.

Implement, to the extent possible, the recommendations outlined in the Department's Rail Station Governance Study

Continue to develop and utilize the Safety Management System to ensure that all opportunities to improve safety are identified, considered, implemented where appropriate, and evaluated

Continue to develop and utilize the Traffic Monitoring System to expedite the collection, processing and dissemination of traffic data

Continue to develop and utilize the Congestion Management System to provide information on transportation system performance to decision makers for selecting and implementing cost-effective strategies to manage new and existing facilities to manage traffic congestion and enhance mobility

Continue to develop, investigate options for, and utilize the highway and transit Intelligent Transportation Systems to improve public safety, manage traffic congestion and provide better public service on the State's roadways, buses and trains

Continue to develop, evaluate and use new materials, methods, procedures and equipment that can reduce the frequency of transportation system maintenance activities or the amount of time required to complete transportation system maintenance and improvement projects

Continue to encourage regional coordination of demand-responsive transportation services for senior citizens and people with disabilities to supplement regularly-scheduled public transit options, and support the purchase of vehicles specially equipped to accommodate persons using wheel chairs

Continue to employ and promote the use of context-sensitive solutions, including early project coordination and well-planned construction management, for all transportation projects in order to meet the needs of the State, its regional interests, and local communities during planning, design and construction

Provide technical support to transportation providers, local and regional governments

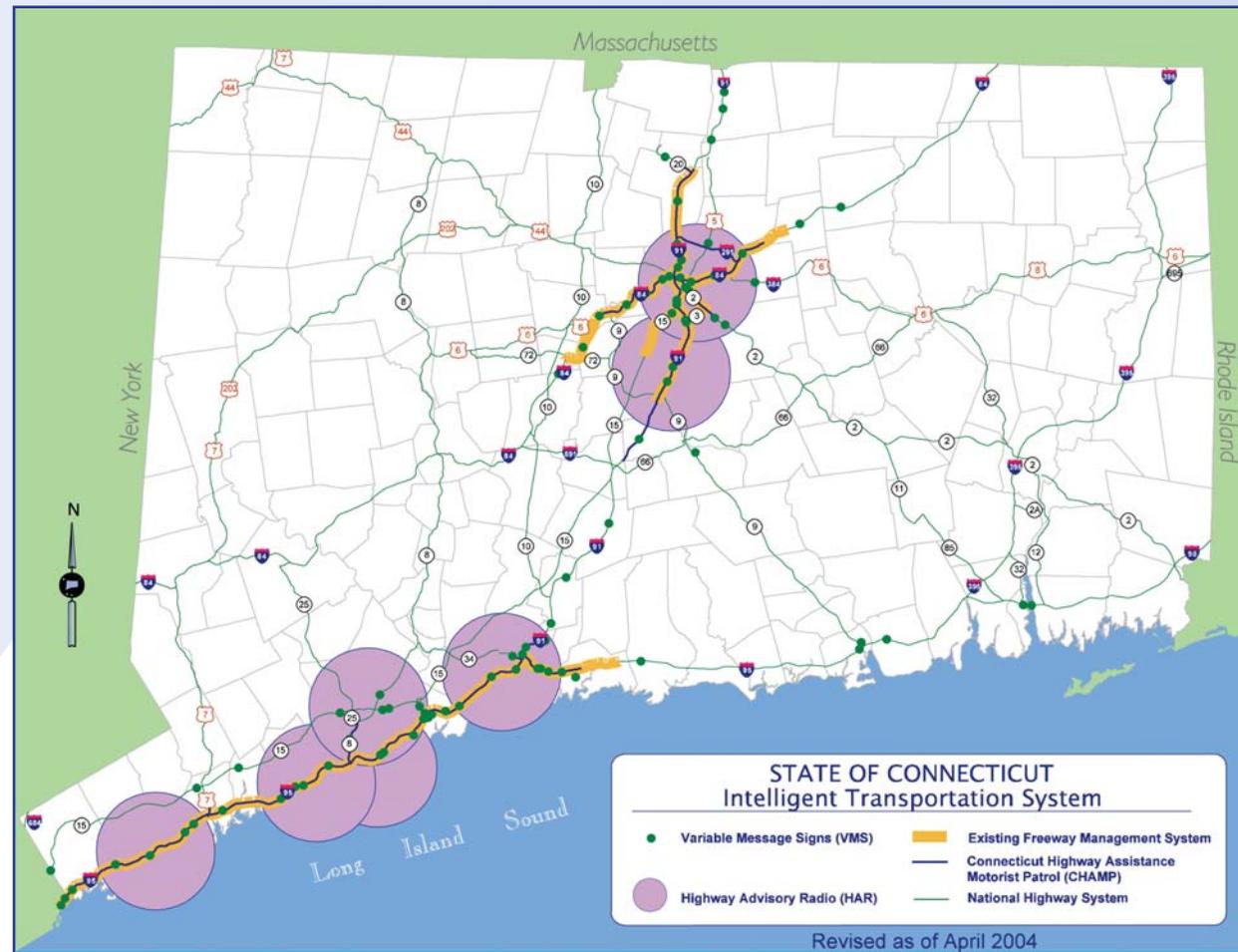
Support the strategies and tactics adopted by the Bradley Board of Directors

Promote innovative solutions to the State's transportation needs and continue efforts to secure adequate funding and resources for ensuring the proper and safe management of the system and its operation

Evaluate alternative mechanisms for funding system management and improvement projects through analysis of project performance and cost

THE DEPARTMENT'S INTELLIGENT TRANSPORTATION SYSTEM IS AN INTEGRAL TOOL FOR MANAGING THE SYSTEM - IT AIDS IN REDUCING TRAFFIC CONGESTION, PROMOTING IMPROVED MOBILITY, INFORMING THE PUBLIC, AND ENSURING SAFETY OF MOTORISTS, PEDESTRIANS AND BICYCLISTS, AS WELL AS ROADWAY CONSTRUCTION WORKERS.

AS PART OF THIS SYSTEM, THE DEPARTMENT OPERATES AN EMPLOYEE-BASED SERVICE PATROL, KNOWN AS THE CONNECTICUT HIGHWAY ASSISTANCE MOTORIST PATROL (CHAMP).



ALSO, THE DEPARTMENT'S NEWINGTON OPERATIONS CENTER IS EQUIPPED WITH A WALL-SIZE SCREEN WHERE REAL-TIME IMAGES OF VARIOUS TRAFFIC CAMERAS, DOPPLER RADAR, AND TRAFFIC ACCIDENT LISTINGS CAN BE VIEWED SIMULTANEOUSLY. THE DEPARTMENT HAS RECENTLY ADDED REAL-TIME INFORMATION CAPABILITIES TO ITS WEB SITE THAT INCLUDE A LIST OF ACTIVE TRAFFIC INCIDENTS AND VIDEO CAMERA IMAGES FROM THE NEWINGTON AND BRIDGEPORT OPERATIONS CENTER SYSTEMS.



## ECONOMIC VITALITY

*Economic vitality of any state, business or community is tightly linked to the quality of life that its businesses and residents enjoy.*

The State of Connecticut's economic vitality is tied to its ability to maintain, improve the efficiency of, integrate and expand its transportation systems to meet current and future state, regional and national mobility needs.

## ISSUES

Since the transportation network is the avenue by which people and goods are moved, it is also the foundation for the State's economic base. A transportation system that results in travel delays hinders just-in-time delivery methods, increases the costs of transporting goods and providing services, and, hence, negatively impacts the ability of Connecticut's businesses and freight distributors to compete in regional and national economic markets for products and services. This leads to emigration of Connecticut's skilled workforce. For Connecticut's communities to prosper, it is essential that the transportation network be adequately maintained and strategically improved in a fashion that is coordinated with land use and local and natural resources.

## STRATEGY

*Support the economic vitality of the United States, the States, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency...*



## ACTIONS

Continue to adequately maintain and improve the State's transportation facilities and infrastructure through proper planning, funding and coordination of efforts

Promote projects that focus on maintenance of the system, improving accessibility, connectivity and mobility, including transit options, adequate commuter parking and coordinated

public transportation route scheduling

Coordinate with the adjacent states to address regional transportation issues

Implement, to the extent possible, the surface transportation-related recommendations of the Bradley Board of Directors

Continue to support state-owned and municipal airports according to approved airport master plans

Evaluate, and revise if appropriate, the State's overall airport policy

Encourage projects that improve airport-land access immediately adjacent to Bradley International Airport and utilize the State's general aviation airports as a means of moving people and products

Support projects that improve seaport-land access and promote water-dependent land uses immediately adjacent to the State's ports

Consider and implement, if feasible and financially possible, the recommendations of the Connecticut Maritime Commission

Support efforts to implement a multi-state intermodal freight initiative

Encourage public/private partnerships to maximize and leverage investments in transportation services and facilities

Continue to encourage efforts to support the funding of transportation system management and improvement projects

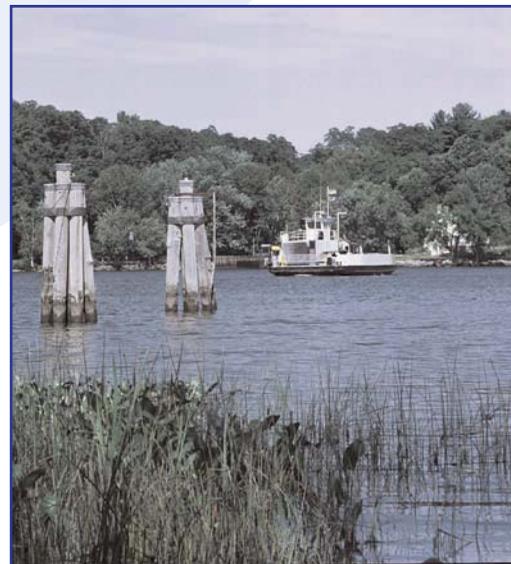
Support funding for programs and projects that address the need for accessible transportation to major employment, medical and educational providers for all the system's users

Continue to seek public input early in the transportation planning process, and employ context-sensitive solutions to preserve the character of rural village centers and natural and historic resources

Encourage innovative solutions to mobility issues that balance the needs of people and freight to promote improved regional and State economic sustainability



THE STATE PORT COMPLEX, LOCATED IMMEDIATELY SOUTH OF I-95 IN THE UPPER PORTION OF NEW LONDON HARBOR IN NEW LONDON, CONNECTICUT, IS OPERATED BY THE DEPARTMENT. TWO 1,000-FOOT LONG CARGO PIERS ARE LOCATED APPROXIMATELY 3.8 MILES UP RIVER FROM THE DEEP WATERS OF LONG ISLAND SOUND VIA THE MAIN NAVIGATIONAL CHANNEL. THE STATE'S AIRPORTS AND PIERS ARE WITHIN 100 MILES OF GLOBALLY COMPETITIVE INTERMODAL RAIL



AND CONTAINER PORTS IN NEW YORK, NEW JERSEY, AND MASSACHUSETTS. IN ADDITION, THE STATE PIERS HAVE BOTH THE ADVANTAGE OF A RAILROAD CONNECTION THAT EXTENDS AS FAR AS CANADA

AND EASY ACCESS TO I-95, MAKING THE COMPLEX ONE OF CONNECTICUT'S MANY VALUABLE ASSETS FOR COMPETING IN REGIONAL AND GLOBAL MARKETS FOR FREIGHT.



THE CONNECTICUT STATE FERRY SERVICE IS USED BY BOTH DAILY COMMUTERS AND TOURISTS, WITH PREDOMINANT USE ON WEEKENDS BY TOURISTS AND RESIDENTS FOR SOCIAL AND RECREATIONAL TRIPS. THE SERVICE IS AN ATTRACTION TO VISITORS AND CONTRIBUTES TO CONNECTICUT'S TOURISM ECONOMY.

## SAFETY & SECURITY

*Safety for motorists and nonmotorists traveling on the State's roadways and public transportation system is the Department's highest priority.*

Prior to the September 11, 2001, terrorist attacks, the Department had several safety and security-related plans in place. Since the terrorist attacks, however, homeland security has become a high priority at both the national and state levels. In response, the Department has instituted a variety of changes to address emergency management procedures and preparedness, and has developed Emergency Response Plans that outline the Department's Homeland Security Advisory System. The Plans were established in accordance with the five threat levels of risk established under the Federal Homeland Security Advisory System.

### ISSUES

Responsibilities relating to safety and security range from system maintenance, hazard elimination and emergency preparedness to ensuring accessibility, safety and comfort of facilities. More specifically, the Department is responsible for monitoring and addressing accident trends relating to impaired driving, speeding or operating too fast for conditions, construction or work zones, lack of automobile occupant protection, or other high-risk factors. Maintaining Connecticut's transportation infrastructure and facilities as a safe and secure transportation system is a high priority, however, doing so is and will continue to be increasingly challenging given the limited amounts of state and federal funding available.



### STRATEGY

*Increase the safety and security of the transportation system for users of motorized and nonmotorized modes...*

### ACTIONS

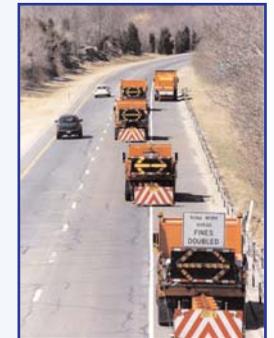
Ensure that safety issues are evaluated regularly and that the necessary funding and resources are available to address security issues identified within the State's transit and highway system, including emergency preparedness and national defense

Continue to update and evaluate the Department's Emergency Response Plans

Continue to evaluate and update *The State of Connecticut's Highway Safety Strategic Plan*; the Department's principal rail equipment safety document, the *System Safety Program Plan (SSPP)*; and the Department's *Annual Safety Report*, *Guiderail Program*, and *Suggested List of Surveillance Study Sites (SLOSSS)*.

CONNECTICUT WAS THE FOURTH SAFEST STATE IN THE NATION IN TERMS OF FATALITY RATE PER 100 MILLION VEHICLE MILES TRAVELED DURING 2000. THERE HAVE BEEN SUBSTANTIAL REDUCTIONS BOTH IN FATAL AND NON-FATAL INJURY CRASHES SINCE THE 1970S AND 1980S.

NEVERTHELESS, CONNECTICUT WAS SUBSTANTIALLY HIGHER THAN THE NATIONAL AVERAGE IN TERMS OF PERCENT OF ALCOHOL/DRUG-RELATED FATALITIES AND WAS SOMEWHAT HIGHER THAN THE OTHER NEW ENGLAND STATES IN 2001. ALCOHOL REMAINS A SIGNIFICANT COMPONENT OF THE OVER-ALL STATEWIDE CRASH PROBLEM.



FATAL CRASHES AND CRASHES THAT RESULT IN SERIOUS INJURIES HAVE CONTINUED TO DECLINE THROUGHOUT THE STATE AS HAVE ACCIDENTS ASSOCIATED WITH CONSTRUCTION DEVICES.

HOWEVER, THE DEPARTMENT MUST CONTINUE TO FOCUS ON ENFORCEMENT OF TRAFFIC LAWS, SAFETY IN ROADWAY CONSTRUCTION/WORK ZONES AND THE SAFETY OF PEDESTRIANS, BICYCLISTS AND MOTORCYCLISTS. SAFETY IN HIGHWAY CONSTRUCTION OR WORK ZONES IS ESPECIALLY IMPORTANT TO BOTH TRAVELERS PASSING THROUGH AND PERSONNEL WORKING IN SUCH ZONES.

Continue to recognize maintenance of the existing system as a high priority and, in so doing, develop and support various activities and programs for promoting safety through coordinated efforts, the latest available technology, and optimal application of resources

Continue to develop and utilize the Safety Management System, Traffic Monitoring System, Congestion Management System, and the Intelligent Transportation System created for the highway system to improve public safety, manage traffic congestion and provide better public service

Investigate options for a transit Intelligent Transportation System to further improve public safety, manage traffic incidents and congestion to provide better public service and increase transit marketshare

Encourage programs that reduce impaired driving and the number of crashes on Connecticut's roadways; support police traffic services; improve the State's traffic records program; and increase the use of automobile occupant protection devices

Continue to provide weight and safety vehicle inspection

Address, to the extent possible, the needs of motor carriers in their compliance with hours of driving rules through improved public and private service areas

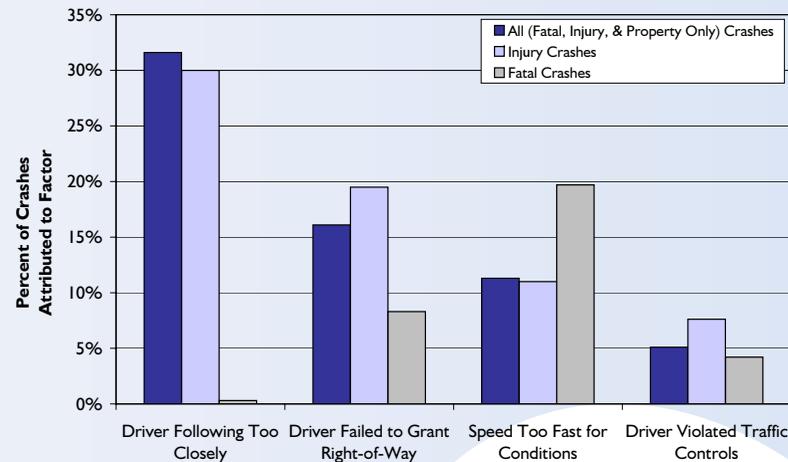
Identify, investigate, and set priorities for preventing and correcting hazardous or potentially hazardous situations in a timely manner

Continue to identify and implement feasible options for increasing the safety of motorcyclists, pedestrians, bicyclists, and other high-risk user groups, such as elderly and disabled persons, with the goal that these practices will contribute to the overall improved safety of all system users, including investigating options for transit vehicle and rail station design to promote safety and accessibility for all passengers

Investigate options for commuter parking, rail parking and rail station design to promote secure environments for passengers

Support Federal Aviation Administration-recommended safety improvements at state-owned airports and municipal airports

**Contributing Factors in Crashes (2001)**



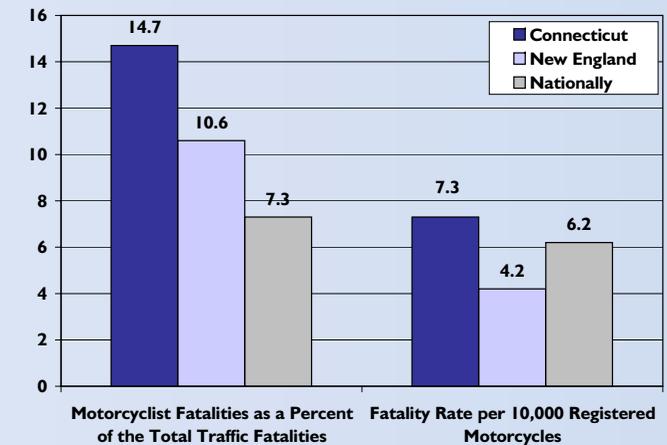
Source: Connecticut Highway Safety Strategic Plan Federal Fiscal Year 2004, Connecticut Department of Transportation

SPEEDING OR OPERATING TOO FAST FOR CONDITIONS CONTINUES TO BE A HIGHWAY SAFETY PROBLEM IN CONNECTICUT AND, IN ADDITION TO SPEEDING, FOLLOWING TOO CLOSELY, FAILURE TO YIELD AND DRIVER VIOLATION OF TRAFFIC CONTROLS COMBINE TO MAKE UP 52.8 PERCENT OF CONNECTICUT'S CRASHES.

THERE REMAIN HIGH-RISK GROUPS IDENTIFIED, THROUGH TRAFFIC CRASH HISTORY, TO BE OVER-REPRESENTED IN CRASHES WHEN COMPARED TO THE GENERAL MOTORING POPULATION OR TO HAVE POTENTIAL TO BE PARTICULARLY VULNERABLE. THESE SPECIAL USER GROUPS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, OLDER DRIVERS, PEDESTRIANS, BICYCLISTS, MOTORCYCLISTS, AGGRESSIVE DRIVERS, DROWSY DRIVERS, COMMERCIAL MOTOR CARRIERS, AND HAZARDOUS MATERIALS CARRIERS.

NATIONALLY, IN 2001, 2 PERCENT OF FATALITIES AND 1 PERCENT OF INJURIES WERE BICYCLISTS, INDICATING THAT CONNECTICUT'S EXPERIENCE OF LESS THAN 1 PERCENT OF FATALITIES IS LOWER THAN THAT OF THE U.S. AS A WHOLE WHILE THE 1.6 PERCENT OF INJURIES IS SOMEWHAT HIGHER.

**Motorcycle-Related Fatalities (2001)**



Source: Connecticut Highway Safety Strategic Plan Federal Fiscal Year 2004, Connecticut Department of Transportation

FATALITY RATES PER REGISTERED MOTORCYCLES IN CONNECTICUT ARE ABOVE THE NATIONAL AVERAGE AND A CONCERN.



PROVIDING ADEQUATE AND SAFE PARKING FACILITIES IS AN ESSENTIAL ELEMENT IN ATTRACTING NEW INTRASTATE TRAVELERS FROM THE HIGHWAY NETWORK TO THE RAIL SYSTEM FROM BOTH A CONVENIENCE AND A PERSONAL SECURITY PERSPECTIVE. IN ADDITION, COMFORT AND SECURITY OF WAITING AREAS ARE FACTORS THAT CAN AFFECT PASSENGERS' USE OF FACILITIES.

## ACCESSIBILITY & MOBILITY

*Accessibility and mobility within a transportation network are determined by a variety of factors, including travel delays resulting from congestion, accidents, maintenance, and construction work as well as the availability and/or convenience of public transportation options.*

Growth of suburban and rural towns has resulted in changing household and work-related travel patterns. These changes are making it increasingly difficult to provide public transportation options that meet the needs and match the schedules of many of Connecticut's residents and businesses. There remains a growing need for transportation options designed for special user groups, such as pedestrians, bicyclists and the elderly and disabled, as both passengers and drivers. Also, efficient movement of freight through the State requires multi-



modal routes dependent on adequate airport-land and seaport-land access. Regardless of improvements and expansions in public and on-demand transportation services, the highway system is and will likely remain the

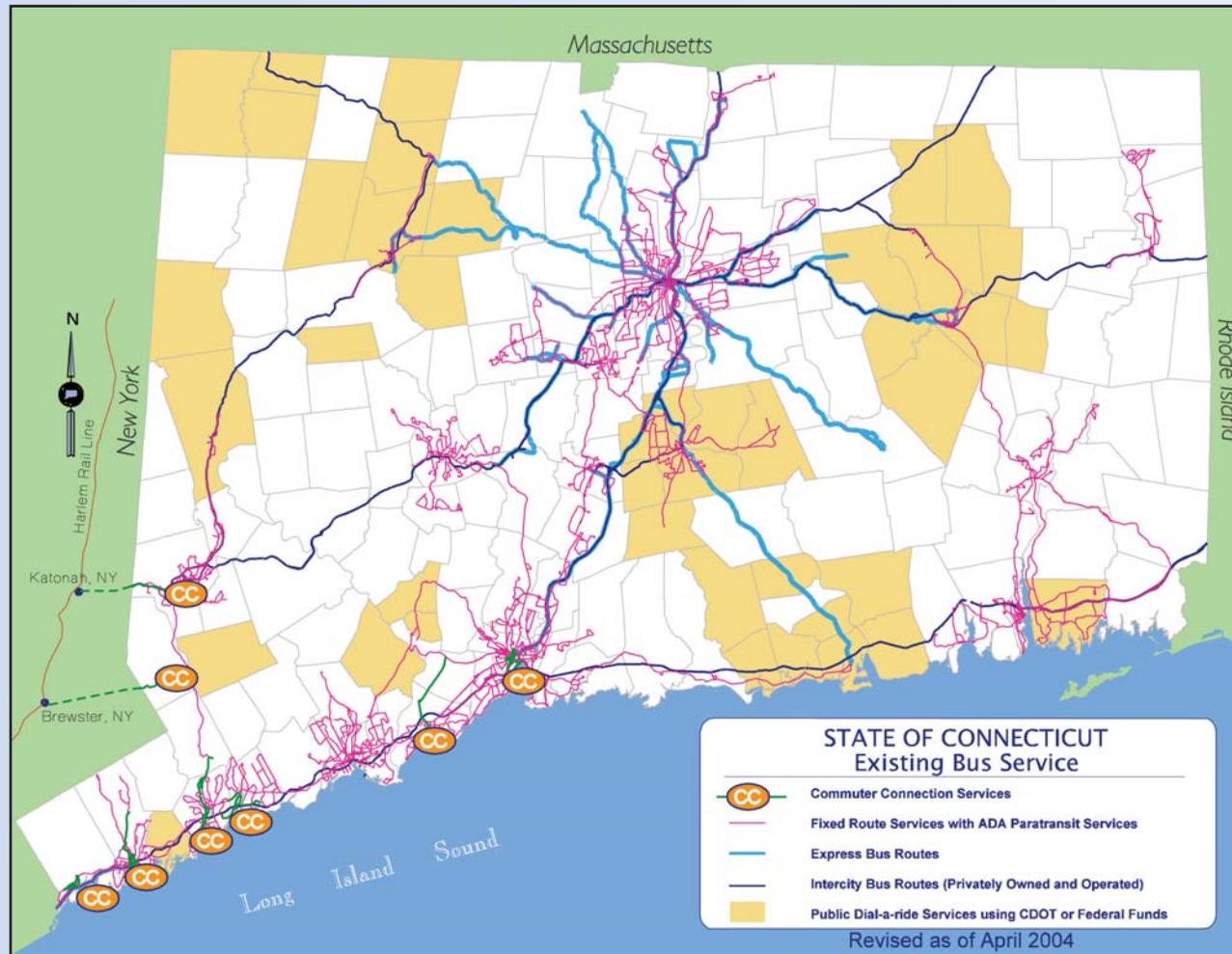
largest and most used component of Connecticut's transportation system, therefore requiring a considerable portion of the available resources. Improvements that connect the highway system through a network of intermodal hubs can serve to provide improved mobility between modes, increase accessibility for the movement of both people and goods, and cost-effectively utilize the existing transportation system.

### ISSUES

A fully functional transportation network requires intermodal options that connect public transportation services, highways, seaports, and airports for efficient movement of people and freight into, through and within the State. Providing such a network will continue to require the identification and provision of innovative, alternative options that are easily accessible and attractive to transit users, including those that are transit-dependent. This will be increasingly difficult given the limited availability of funding.

### STRATEGY

*Increase the accessibility and mobility options available to people and for freight...*



## ACTIONS

Encourage the use and development of new technology, equipment and practices for increasing accessibility and mobility through easily implemented and cost-effective methods, especially for construction and maintenance practices to reduce and minimize travel delays

Continue to participate in and promote the efforts of partnerships for coordinating services to address the mobility needs of transit-dependent individuals, and elderly, disabled, and low-income individuals

Promote and provide, to the extent possible, improved fixed-route and demand-responsive public transportation service and connections between rural areas and major urban/suburban centers

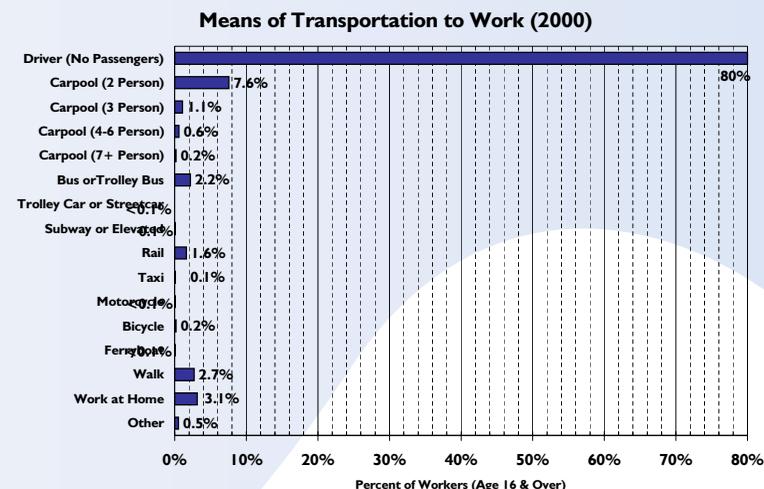
Promote and provide, to the extent possible, expanded and improved rail service, rail parking facilities and rail stations as well as increased frequencies of bus service and hours of operation for both fixed-route and demand-responsive public transportation systems

Support programs and projects that address special user needs for accessible inter-regional public transportation to major employment, medical, and educational providers and improved functionality of the transportation system (i.e. signage, traffic signal timing, audible alarms on buses)

Promote and participate in information sharing, partnerships, and coordinated efforts with all levels of government, the business sector, interested parties, and transportation providers, with respect to transportation planning

Provide technical support to decision-makers at the national, state, regional and local levels to encourage coordinated, cost-efficient options for improving accessibility and mobility across and between modes

DURING THE PAST DECADE, THERE WAS AN INCREASE IN THE NUMBER OF "DRIVE ALONE" COMMUTERS AND IN THE NUMBER OF COMMUTERS WHO USE MASS TRANSIT, AND A DECREASE IN THE NUMBER OF CARPOOLERS. THIS TREND HAS CONTRIBUTED TO THE GROWTH IN TRAFFIC VOLUME AND HAS PLACED STRAINS ON THE EXISTING TRANSPORTATION SYSTEM.



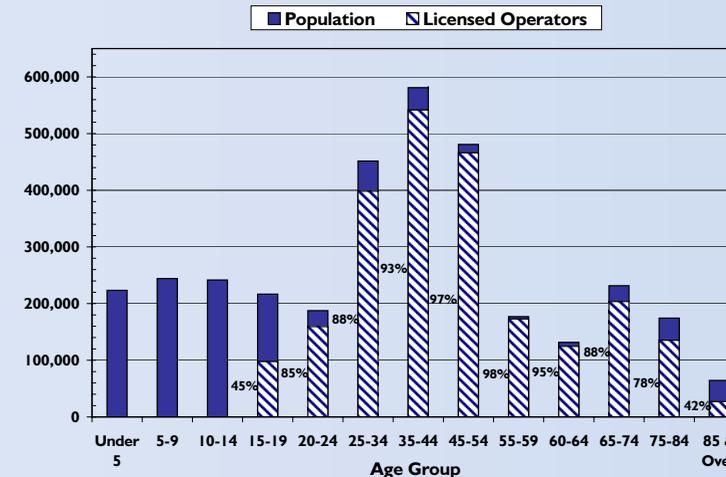
Source: 2000 Census. Graphic revised as of April 2004.  
Special Notes: 2000 Census data includes trips from outside of Connecticut to Connecticut.

Seek new funding programs and make efforts to secure existing funding levels to support accessibility and mobility improvement projects

Continue to reevaluate and update the *Connecticut Statewide Bicycle and Pedestrian Transportation Plan* which supports enhancing the bicycling and walking environment throughout Connecticut in an effort to meet the public's demand for improved mobility

Consider potential impacts of global warming on transportation infrastructure and services, particularly along the coast, when designing, constructing and prioritizing investments in transportation infrastructure

Comparison of State Population to Licensed Operators by Age Group in 2000



Source: Connecticut Department of Motor Vehicles and 2000 Census. Graphic revised as of October 2002.  
Special Notes: In Connecticut, licensed operators may not be less than 16 years of age. Data labels shown on graphic indicate, by age group, licensed operators as a percent of population.

A RELATIVELY LARGE NUMBER OF CONNECTICUT'S RESIDENTS MAINTAIN OPERATOR LICENSES IN THEIR SENIOR YEARS. BY 2020, 17 PERCENT OF THE STATE'S POPULATION WILL BE 65 OR OLDER, AND ALMOST HALF OF THESE OLDER PERSONS WILL BE 75 OR OLDER. THIS TREND IS MIRRORED NATIONALLY WHERE, IN THE NEXT 25 YEARS, THE NUMBER OF OLDER DRIVERS IS ANTICIPATED TO MORE THAN DOUBLE. IDENTIFYING AND IMPLEMENTING PRACTICAL SOLUTIONS TO MEET TRANSPORTATION NEEDS FOR THIS SEGMENT OF THE POPULATION WILL BECOME INCREASINGLY IMPORTANT.

Implement, to the extent possible, the recommendations outlined in the Department's New Haven Line Fleet Configuration Analysis, Danbury Electrification Study and the New Haven - Hartford - Springfield Commuter Rail Study

Continue to coordinate with appropriate local, state and federal agencies, the Connecticut Maritime Commission and other entities to maintain and improve water and landside access to Connecticut's ports

## INTEGRATION & CONNECTIVITY

Connecticut's residents, businesses, local and regional governments continue to identify integration and connectivity issues within the State's transportation system, requesting improved public transportation connections, travel alternatives for single-occupancy vehicles, and minimized peak time traffic congestion and delays.

Smooth, dynamic transitions between modes, such as moving people from vehicle, bicycle or foot to public transportation options, or goods from barge onto rail and into trucks, is required for Connecticut to compete for businesses, attract visitors, and retain residents. Transit and pedestrian-friendly communities can be effective enticements. Providing well-timed and well-located connections that build on the existing infrastructure through coordinated land use and transportation planning efforts and efficient use of funds and resources is necessary to curtail unorganized, sprawl development patterns that will only further strain Connecticut's transportation network.

### ISSUES

Connecticut's transportation network, although expanded through the years, requires special attention to maximize its efficiency for transporting people and goods. "Fine-tuning" of intermodal connections to create integration between modes is necessary to effectively address mobility and accessibility issues facing the State.

### STRATEGY

Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight...



### ACTIONS

Support development at and surrounding the State's airports, seaports, and rail system that is consistent with commodity movement needs

Provide technical assistance to and participate in partnerships with businesses, transportation providers, local and regional governments on transportation planning

Support transit-oriented development and encourage developers to implement facility designs that are accessible to public transportation

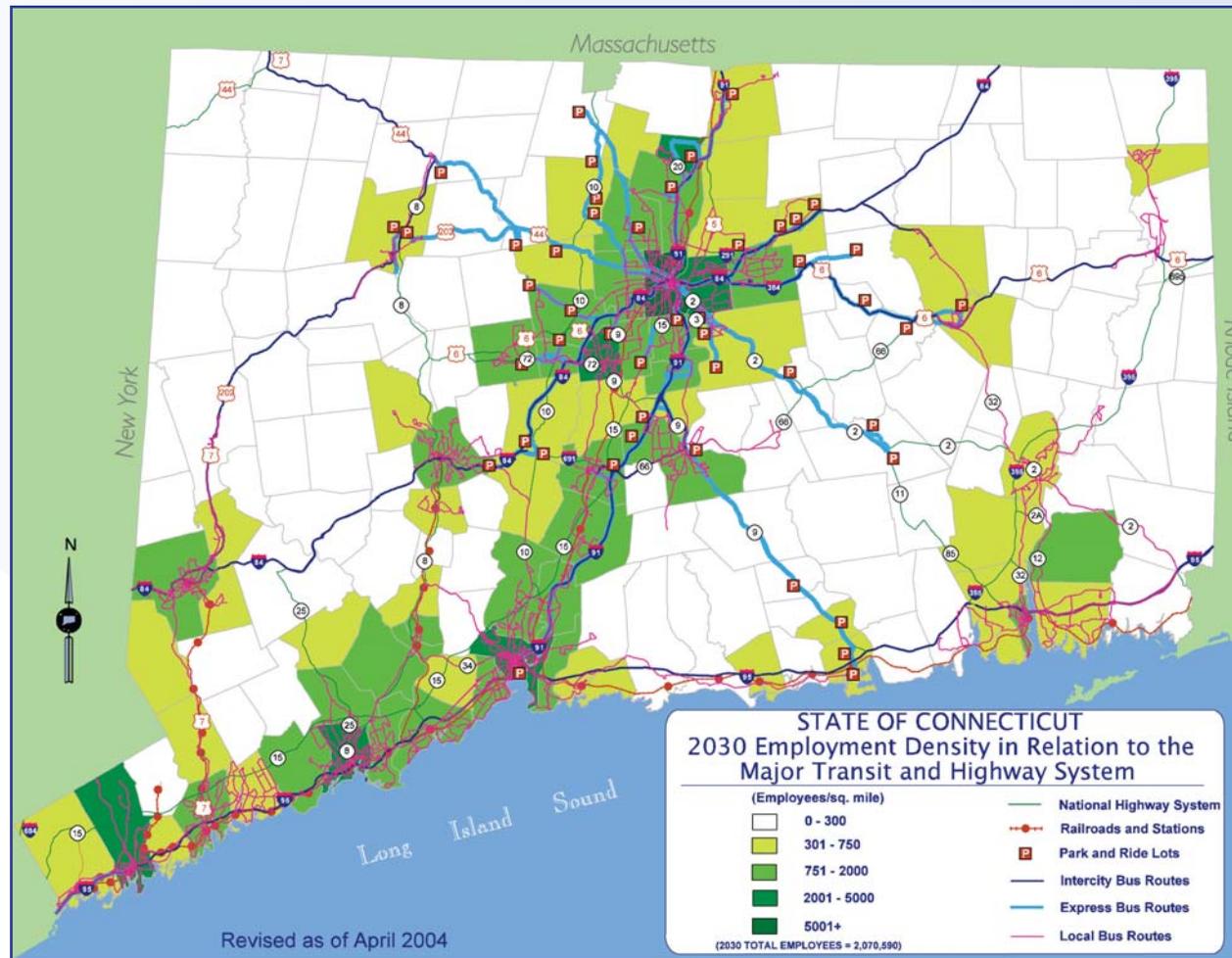
Coordinate route planning for public transportation options both between modes and providers

Support increased rail station parking, expanded shuttle services to/from rail stations, and extension of rail commuter lines, where feasible

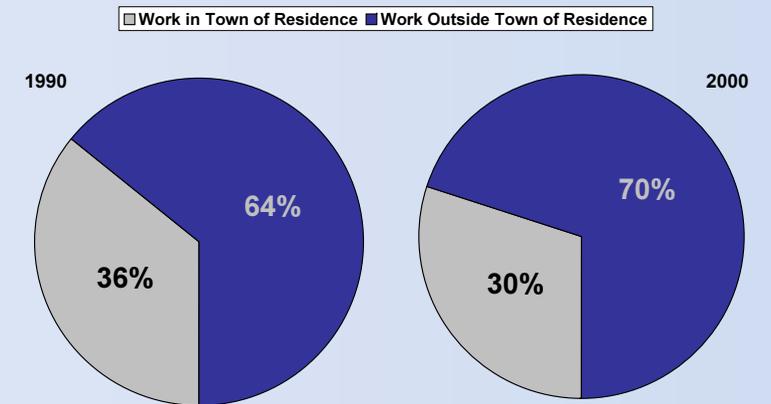
Support greater use of waterways for passenger and freight transportation

Promote regional and municipal planning efforts that support existing transportation infrastructure

Support statewide programs that provide low-cost incentives to encourage people and businesses to locate in areas accessible by existing public transportation services



Comparison of Place of Employment to Town of Residence



Source: 1990 Census and 2000 Census. Graphic revised as of May 2002.

THE PERCENTAGE OF CONNECTICUT'S WORK FORCE COMMUTING TO EMPLOYMENT SITES OUTSIDE THEIR TOWNS OF RESIDENCE IS INCREASING, AFFECTING THE AMOUNT OF TIME IT TAKES COMMUTERS TO MAKE TRIPS, THEIR TRAVEL PATTERNS DURING TRIPS, AND THEIR CHOICE OF MODE. THIS TREND IS ADDING TO THE NEED FOR INTEGRATING TRANSPORTATION SYSTEMS THROUGH EFFICIENT AND EASILY ACCESSED CONNECTIONS AND EXPANDING THE GEOGRAPHICAL COVERAGE OF SERVICES

## ENVIRONMENT, ENERGY CONSERVATION & QUALITY OF LIFE

*Urban growth and more dispersed travel patterns are leading to increased energy use, and increasing demands on existing transportation systems.*

These trends have resulted in requiring movement of people and goods over longer distances. This means greater energy consumption and greater demands on the transportation infrastructure.

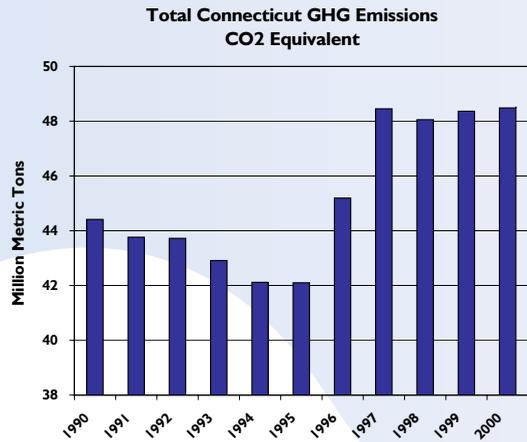
### ISSUES

Since transportation requires a massive amount of energy, and, except in the cases of bicycling and walking, this energy is provided by one of the various types of transportation fuels, the movement of people and goods can be costly in terms of both money and environmental well-being. Development associated with the changing travel and growth patterns creates impervious surfaces that can contribute to nonpoint source pollution and degradation of natural resources. Furthermore, Connecticut's greenhouse gas (GHG) emissions from non-renewable fuel consumption are contributing to the global climate change. In 2004, Connecticut became the first state to develop a comprehensive climate change action plan and immediately translate it into legislative and administrative proposals for implementation.

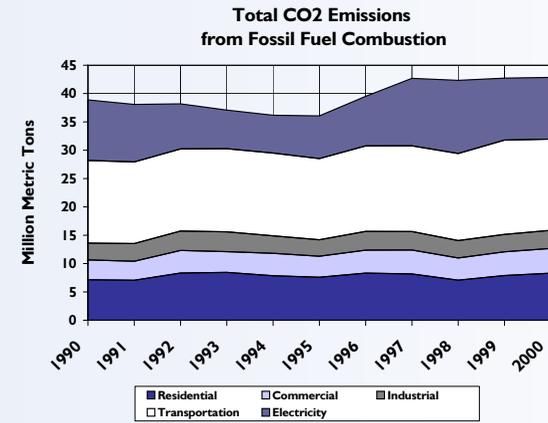
### STRATEGY

*Protect and enhance the environment, promote energy conservation, and improve quality of life...*

GHG EMISSIONS DECLINED BY 5 PERCENT FROM 1990 THROUGH 1995 BUT INCREASED BY MORE THAN 15 PERCENT FROM 1996 THROUGH 2000. THE INCREASE PARTLY RESULTED FROM CHANGES IN FUEL MIX USED IN ELECTRIC POWER GENERATION, IMPROVEMENTS IN THE ECONOMY AND INCREASES IN THE POPULATION. CO<sub>2</sub> EMISSIONS FROM FOSSIL FUEL COMBUSTION RESULT FROM MOBILE SOURCES, SUCH AS MOTOR VEHICLES, AND FROM STATIONARY SOURCES (I.E. POWER PLANTS, INDUSTRIAL FACILITIES AND HOME HEATING SYSTEMS). APPROXIMATELY 40 PERCENT OF CONNECTICUT'S ANNUAL CO<sub>2</sub> EMISSIONS ARE ATTRIBUTABLE TO TRANSPORTATION.



Source: Connecticut Greenhouse Gas Emissions Inventory 1990-2000, August 2003



Source: Connecticut Greenhouse Gas Emissions Inventory 1990-2000, August 2003

### ACTIONS

Continue to evaluate and mitigate the affects of transportation projects on the natural environment and quality of life, including air quality, noise, ecological resources, water resources, environmental justice, and cultural and archaeological resources

Support programs that reduce negative impacts to the quality of our air, water, other natural resources and overall quality of life by evaluating approaches to land-use and development that link land use planning objectives with transportation systems planning

Support programs and efforts that focus on minimizing fuel consumption, black carbon emissions, and single-occupancy vehicle trips as well as address the environmental and health costs associated with non-renewable fuel emissions

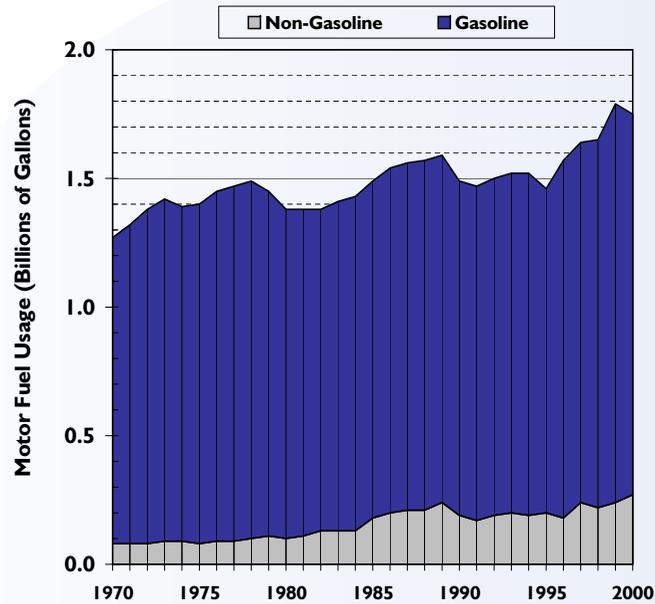
Continue to participate on the Governor's Steering Committee on Climate Change and support the Committee's efforts to implement recommendations for reducing harmful greenhouse gas (GHG) emissions generated by the State's transportation system

Consider and address in design plans, the needs of owners of alternative fuel vehicles when constructing and renovating transportation facilities.

Encourage transportation research and projects that explore innovative solutions to GHG emissions using advanced technology, economically feasible options, and proven results for reducing emissions both in the short and long-terms

Continue air quality conformity reporting for major transportation projects

### Motor Fuel Usage in Connecticut



Source: Highway Statistics Table MF-21. Data following 2000 not yet available. Graphic revised as of May 2002.

Encourage research and projects that explore innovative solutions for responding to changing land and water patterns, including flooding and loss of coastline caused by increased frequency and severity of meteorological events which may affect components of the transportation system infrastructure

Encourage efforts that focus on risk and response assessment, including prediction tools, products and strategies for potential maintenance, system planning, safety management and emergency preparedness issues arising from global climate change

Encourage practices and policies that shorten delivery time and provide alternatives for goods movement through environmentally-friendly methods that reduce fuel consumption, such as coordinated intermodal transport

DESPITE TECHNOLOGICAL ADVANCES IN FUEL EFFICIENCY, WHICH CONSIDERABLY REDUCED THE AMOUNT OF FUEL NEEDED BY VEHICLES, THE OVERALL TREND CONTINUES TO BE AN INCREASE IN THE VOLUME OF MOTOR FUEL SOLD.



IN RESPONSE TO GROWING TRAFFIC VOLUMES ON LOCAL AS WELL AS STATE-MAINTAINED ROADS, SOME CYCLISTS HAVE SOUGHT AUTO-FREE ROUTES FOR COMMUTING AS WELL AS RECREATIONAL USES.

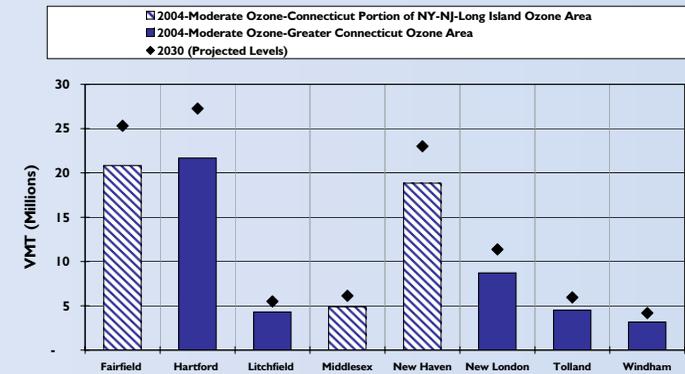
DAILY VMT IN CONNECTICUT HAS BEEN GROWING STEADILY SINCE 1970. FUTURE PROJECTIONS FORECAST CONTINUED SLOW GROWTH IN VMT AS BOTH THE STATE AND THE ECONOMY CONTINUE TO GROW. THE AVERAGE NUMBER OF VEHICLES AVAILABLE PER HOUSEHOLD HAS BEEN INCREASING AND THIS TREND IS EXPECTED TO CONTINUE.

Continue to implement energy performance standards for State transportation facilities, promote green building design on major capital projects, purchase environmentally preferable products, and use electronic media

Continue to reevaluate and update the *Connecticut Statewide Bicycle and Pedestrian Transportation Plan* which supports enhancing the bicycling and walking environment throughout Connecticut in an effort to meet the public's demand for a better quality of life

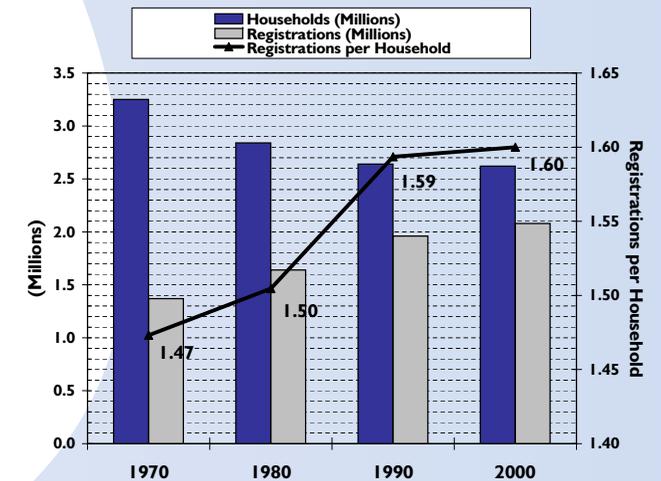
Encourage transportation projects that support and preserve the community character, especially in rural centers and historic areas, through the use of context-sensitive design practices and support of federal Enhancement Program funding for streetscapes and recreation trails

### Vehicles Miles Traveled (VMT) by County



Source: 2004 & 2030 Connecticut Department of Transportation Travel Model (Series 27E). Graphic revised as of April 2004.  
Special Notes: Data represents the Average Daily vehicle miles of travel. Graph shows anticipated June 2004 ozone attainment designations. Ozone attainment area projections not available for

### Comparison of Passenger Vehicle Registrations to Households



Source: 1970 Census, 1980 Census, 1990 Census, 2000 Census, and Connecticut Department of Motor Vehicles. Graphic revised as of May 2002.

## SPECIFIC ACTIONS - MAJOR PROJECTS & STUDIES

The master transportation plan (MTP) identifies projects and programs that the Department of Transportation will be pursuing during the next ten years. The master transportation plan (MTP) is revised and published biennially and submitted to the Governor on or before January 31st of each odd-numbered year pursuant to Section 13b-15 of the State's General Statutes. Accordingly, the Department will continue to update its listing of proposed major projects and corridor studies contained in the MTP as a means of addressing the seven factors described herein. This regular process of reevaluation is necessary to ensure that (1) the State's changing transportation needs are addressed and (2) the State's limited resources are efficiently and appropriately allocated.

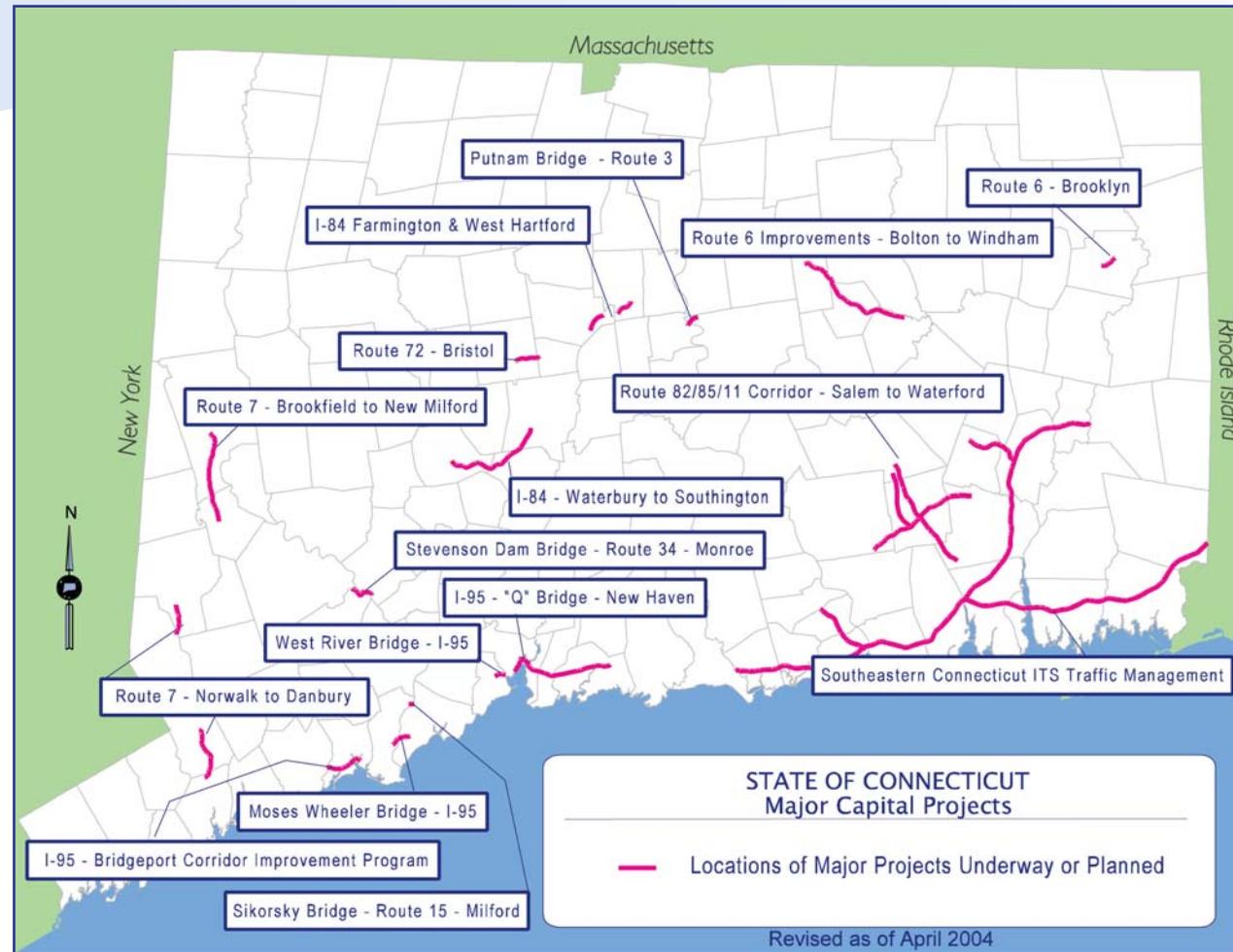
### MAJOR PROJECTS

Following is a list, as of April 2004, of major projects underway or planned:

- Route 6 corridor improvements from Bolton to Windham
- Route 7 bypass of Brookfield commercial district and widening in New Milford
- I-84 lane addition from Waterbury to Southington
- Route 72 realignment and widening from Plainville to Route 229 in Bristol
- I-95 bridge rehabilitation and Corridor Improvement Program in Bridgeport
- I-84 Operational and Safety Improvements in Farmington and West Hartford
- Rehabilitation of the Putnam Bridge over the Connecticut River in Wethersfield and Glastonbury
- Rehabilitation of the West River Bridge carrying I-95 over the West River in New Haven

- I-95 New Haven Harbor Crossing Improvement Program, including replacement of the Pearl Harbor Memorial Bridge (Q- Bridge), reconfiguration of the I-91/I-95/Route 34 interchange, and I-95 reconstruction and operational improvements
- Replacement of the Moses Wheeler Bridge carrying I-95 over the Housatonic River and Naugatuck Avenue in Milford and Stratford
- Route 34 Stevenson Dam Bridge improvements in Monroe/Derby

- Route 6 corridor improvements in Brooklyn
- Route 82/85/111 corridor improvements from Salem to Waterford
- Route 7 corridor improvements including completion of the Merritt Parkway interchange in Norwalk, widening of Route 7 from Grist Mill to Route 33, and widening of existing Route 7 from Danbury to Ridgefield
- Bus Rapid Transit System from New Britain to Hartford
- Stamford Urban Transitway



Bus maintenance facilities for New Haven and Waterbury areas  
 New Haven Line catenary replacement, transportation crew facility, and fiber optic communication network

342 EMU Replacement Vehicles - New Haven Line

New Haven Line parking expansion at New Haven, Stratford, Bridgeport, Fairfield and Wilton stations

New Haven Line Americans with Disabilities Act (ADA) improvements in Milford, Fairfield, Westport and Darien

Southeastern Connecticut ITS traffic management system

Shore Line East rail station improvements in Branford, Guilford, Madison, Clinton and Westbrook

Reconfiguration of New Haven rail station track and signal system

Installation of centralized traffic control on the New Haven Line-Danbury Branch

Various bridge replacement projects along New Haven Line

Bridgeport Intermodal Center

Norwich Transportation Center

### MAJOR CORRIDOR STUDIES

Following is a list, as of April 2004, of major corridor studies underway or planned:

Hartford-East Bus Rapid Transit Feasibility Study

Downtown Hartford Bus Circulation Study

Griffin Corridor Reassessment

New Haven-Hartford-Springfield Commuter Rail Study

West Haven/Orange Federal Environmental Assessment for a new rail station

Danbury Electrification Feasibility Study

Darien/South Norwalk Rail Parking Study

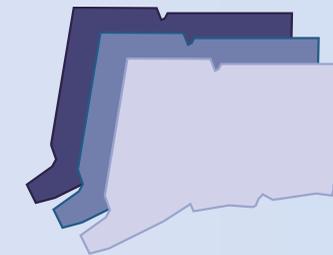
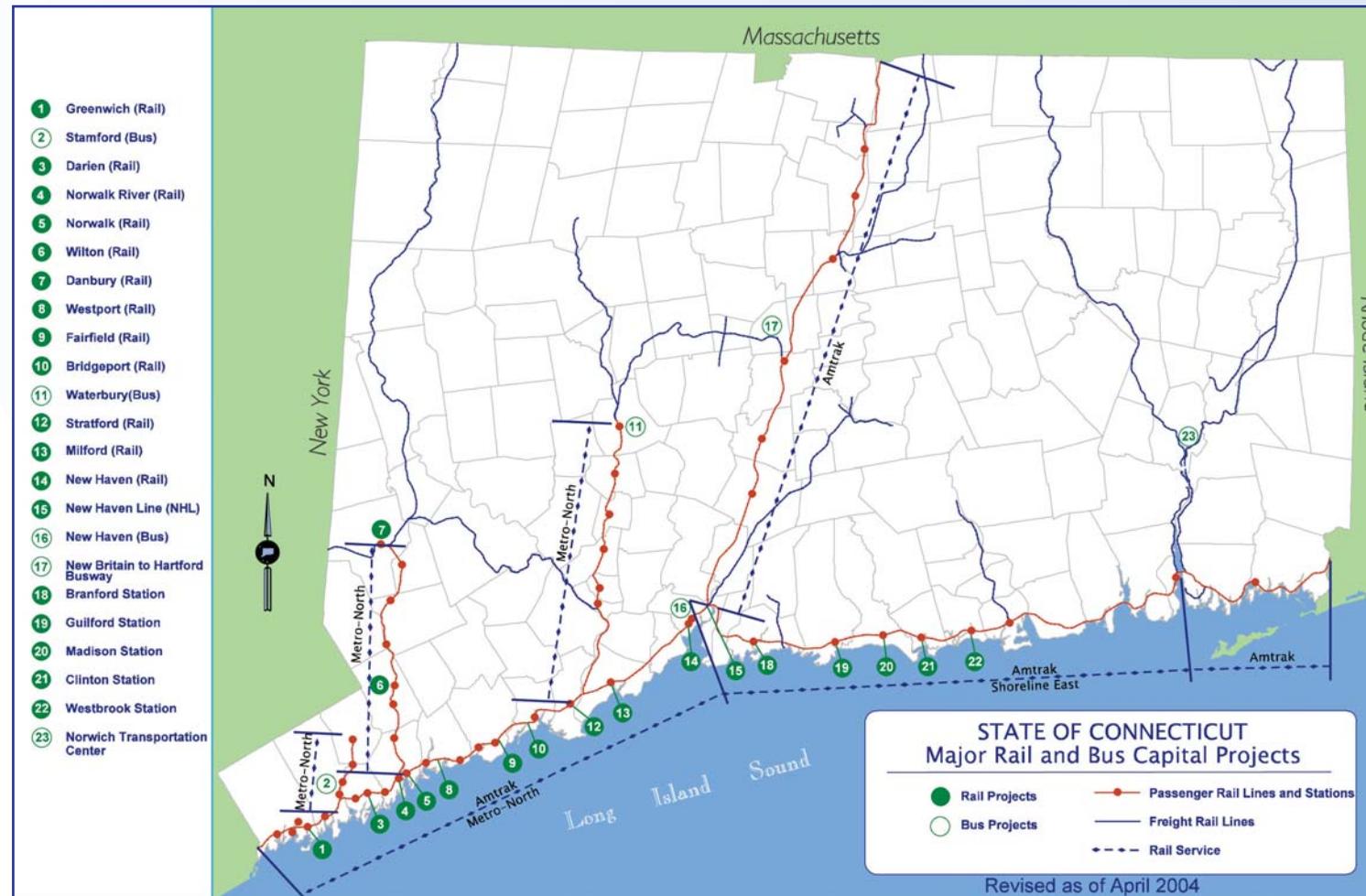
South Central Regional Transit Development Study

I-84/Route 8 interchange in Waterbury

I-84 Waterbury/ NY State Line Federal Environmental Impact Statement

I-95 Branford-Rhode Island Feasibility Study

I-95 Operational Improvement Study

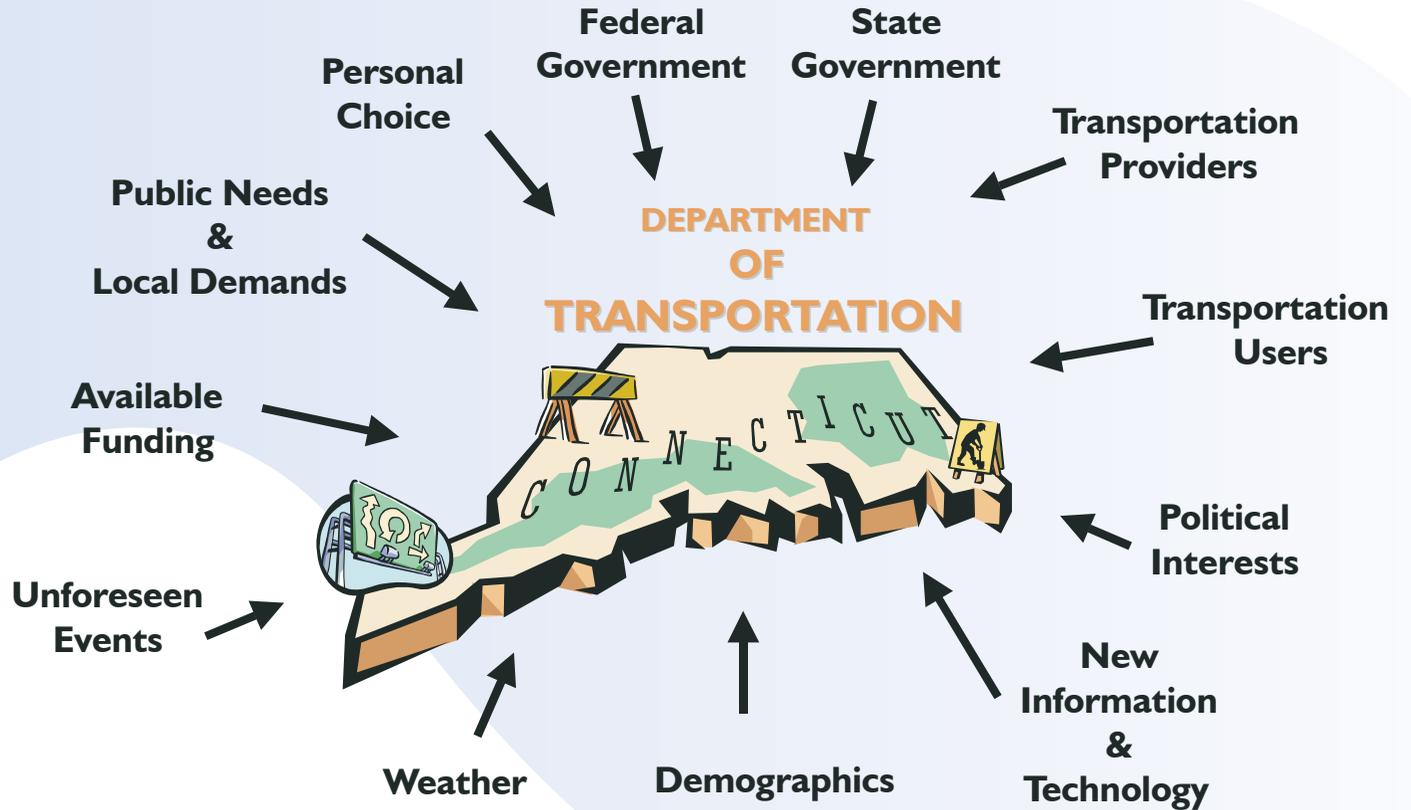


The next MTP for the State of Connecticut will be published in January 2005. As part of the process of updating the Plan, the Department will identify major projects and corridor studies that will be undertaken during the upcoming ten years, as well as relevant projects in adjacent states.

## EXTERNAL INFLUENCES

There are a number of key factors that can determine the issues and influence the selection of strategies for addressing the issues. These external influences can affect how much money is available for transportation projects, what projects are pursued, the scope of projects and the timing of project studies and implementation. These influences generally fall into the following categories...

- ..... Federal Government
- ..... State Government
- ..... Transportation Providers
- ..... Transportation Users
- ..... Political Interests
- ..... New Information & Technology
- ..... Demographics
- ..... Weather
- ..... Unforeseen Events
- ..... Available Funding
- ..... Public Needs & Local Demands
- ..... Personal Choice



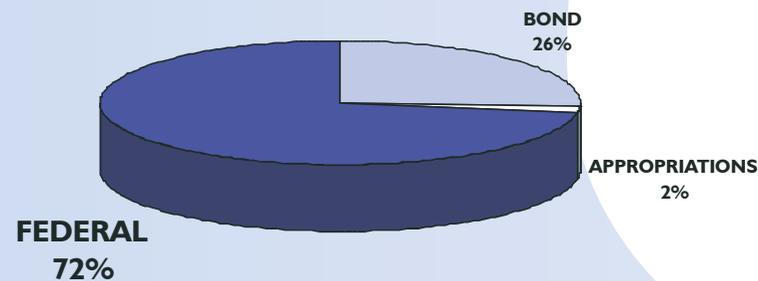
Of these factors, the federal government and state government are the most significant. The laws passed by Congress and the Connecticut General Assembly dictate or influence what the Department does. Thus, as shown in the diagram, most of the factors influence federal and state laws and regulations which, in turn, affect the actions of state agencies such as the Department.

**MORE THAN HALF OF THE MONEY FOR CONNECTICUT'S TRANSPORTATION CAPITAL PROJECTS COMES FROM THE FEDERAL GOVERNMENT.**

Laws passed by Congress dictate what kinds of projects states can spend federal money on and how much money the Department is able to spend on various types of projects.

Currently, Congress is in the process of drafting a law (referred to as federal surface transportation reauthorization legislation) to enable the federal government to continue to provide transportation funding to the states. The provisions of the new law may differ from the current law, which expired on September 30, 2003. The amounts of funding may change and the requirements for getting the funding may change. The final outcome will be the result of the political process.

**Capital Program Source of Funds  
FFY 2003 Funds Authorized, Total = \$723.7 Million**



Source: Connecticut Department of Transportation, Bureau of Finance & Administration. Graphic revised as of April 2004.

State government, particularly the Connecticut General Assembly, also has significant influence on the Department's transportation projects and programs. In addition to getting money from the federal government, the Department pays for transportation projects and services with revenue from the State's Special Transportation Fund (STF). Approximately 52 percent of the revenue comes from state motor fuel taxes and more than 25 percent of the revenue comes from Motor Vehicle Receipts. Of Connecticut's STF funds, a significant percent is used to pay the debt on transportation projects paid for with bonds.

After payment of debt service, the Department's priority is to maintain and preserve the existing transportation system in Connecticut.

How, when, and the extent to which the State of Connecticut can implement strategies and actions identified in this Plan will be determined by the laws and regulations passed by Congress and the Connecticut General Assembly, and influenced by the other external factors as previously noted.

The effectiveness of the strategies and actions in meeting mobility needs will be affected by decisions on land use, and determined by the choices people make with respect to where they live, work and play, and how they travel to their destinations.

